	EMPLOYEE POST-TRAVEL DISCLOSURE FORM Original Amendme
dut Sta for	is form is for disclosing the receipt of travel expenses from private sources for travel taken in connection with official ries. This form does not eliminate the need to report privately-funded travel on the annual <i>Financial Disclosure tements</i> of those employees required to file them. In accordance with House Rule 25, clause 5, you must complete this m and file it with the Clerk of the House, by email at gifttravelreports@mail.house.gov, within 15 days after travel is impleted. Please do not file this form with the Committee on Ethics.
	TE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.
1.	Name of Traveler: Kyle Klein
2.	a. Name of Accompanying Relative:
	b. Relationship to Traveler: Spouse Child Other (specify):
3.	a. Dates: Departure: 8/8/22 Return: 8/11/22
	b. Dates at Personal Expense, if any:
4.	Departure City: Dulles Destination: San Francisco Return City: Arlington/DCA
5.	Sponsor(s), Who Paid for the Trip: Stanford University Human-Centered Artificial Intelligence
6.	Describe Meetings and Events Attended: I spent four days with a group of bipartisan, bicameral staff hosted by Stanford HAI to hear from a number of guest lecturers, primarily Stanford faculty, as well as industry stakeholders regarding emerging policymaking challenges and ethics related to the field of artificial intelligence. These topics covered, national security, economics, education,
7.	Attached to this form are <i>each</i> of the following, <i>signify that each item is attached by checking the corresponding box</i> :
	a. a completed Sponsor Post-Travel Disclosure Form;
	b. the <i>Primary Trip Sponsor Form</i> completed by the trip sponsor <i>prior</i> to the trip, <i>including all</i> attachments <i>and</i> the <i>Additional Sponsor Form(s)</i> ;
	c. page 2 of the completed <i>Traveler Form</i> submitted by the employee; <i>and</i>
	d. the letter from the Committee on Ethics approving my participation on this trip.
8.	a. I represent that I participated in each of the activities reflected in the attached sponsor's agenda.
	Signify statement is true by checking the box.
	b. If not, explain:
I ce	ertify that the information contained on this form is true, complete, and correct to the best of my knowledge.
Sig	nature of Traveler: Date: 8/33/22
I au	ithorized this travel in advance. I have determined that all of the expenses listed on the attached Sponsor Post-Travel

Disclosure Form were necessary and that the travel was in connection with the employee's official duties and would not

\_\_\_\_ Date: 73/22

create the appearance that the employee is using public office for private gain.

Signature of Supervising Member: \_ Version date 3/2021 by Committee on Ethics

Name of Supervising Member:

### SPONSOR POST-TRAVEL DISCLOSURE FORM

Original	Amendmen
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This form must be completed by an officer of any organization that served as the primary trip sponsor in providing travel expenses or reimbursement for travel expenses to House Members, officers, or employees under House Rule 25, clause 5. A completed copy of the form must be provided to each House Member, officer, or employee who participated on the trip within ten days of their return. You must answer all questions, and check all boxes, on this form for your submission to comply with House rules and the Committee's travel regulations. Failure to comply with this requirement may result in the denial of future requests to sponsor trips and/or subject the current traveler to disciplinary action or a requirement to repay the trip expenses.

NO	TE: Willful or knowi	ing misrepresentations on th	is form may be subje	ect to criminal prosect	ution pursuant to 18 U.S.C. § 1001.
1.	Sponsor(s) who paid for the trip: Stanford Instititue for Human-Centered Artificial Intelligence				
2.	Travel Destination(s): Stanford University, Stanford, CA				
3.	Date of Departure	: August 8, 2022	Date o	of Return: August	11, 2022
4.	One office of the share of				
	Note: You may list	more than one traveler on	a form only if <i>all</i> i	nformation is <i>identi</i>	ical for each person listed.
5.	Actual amount of	expenses paid on behalf o	f, or reimbursed to	, each individual nar	med in Question 4:
		Total Transportation Expenses	Total Lodging Expenses	Total Meal Expenses	Total Other Expenses (dollar amount per item and description)
	Traveler	\$1157.95 (per round trip economy class ticket) \$115 Ground	\$245 per night, \$735 total	\$65 per day, \$195 total	
	Accompanying Family Member				
6.		connected to the trip were is true by checking box.	for actual costs inc	curred and not a per	diem or lump sum payment.
I ce			form is true, comp	lete, and correct to	the best of my knowledge.
Sig	nature: Tussel	lates.		Date:	8/23/22
Na	me: Russell Wa	ıld		Title:	Director of Policy
Or	ganization: Stanf	ord Insitute of Humai	n-Centered Arti	ficial Intelligence	Э
		the above-named organize			

Committee staff may contact the above-named individual if additional information is required.

If you have questions regarding your completion of this form, please contact the Committee on Ethics at 202-225-7103.

Telephone: **202 630-2724** 

Email: rwald@stanford.edu

Address: 353 Serra Mall, Stanford, CA, 94305

#### **TRAVELER FORM**

This form should be completed by House Members, officers, or employees seeking Committee approval of privately-sponsored travel or reimbursement for travel under House Rule 25, clause 5. The completed form should be submitted directly to the Committee by each invited House Member, officers, or employee, together with the completed and signed trip sponsor form(s) and any attachments. A copy of this form, minus this initial page, will be made available for public inspection. This form and any attachments may be delivered to the Committee at 1015 Longworth or e-mailed to <a href="mailto:travel.requests@mail.house.gov">travel.requests@mail.house.gov</a>.

Your completed request must be submitted to the Committee no less than 30 days before your proposed departure date. Absent exceptional circumstances, permission will not be granted for requests received less than 30 days before the trip commences. You must receive explicit approval from the Committee before you depart on this trip.

Name of Traveler: Kyle Klein
$NOTE: Will full or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. \S1001.$
I certify that the information contained on both pages of this form is true, complete, and correct to the best of my knowledge.
Signature: Digitally signed by kyle.klein Date: 2022.07.08 12:02:45 -04'00'
Name of Signatory (if other than traveler):
For Staff (name of employing Member or Committee): Homeland Security
Owe Address: 117 Ford House Office Building
Telephone Number: 202-226-8417
Email Address of Contact Person: Kyle.klein@mail.house.gov
Check this box if the sponsor ing entity is a media out let, the purpose of the trip is to make a media appearance sponsored by that entity, and these forms are being submitted to the Committee less than 30 days before the trip departure date.
NOTE: You must complete all of the contact information fields above, as Committee staff may need to contact you if additional information is required.
<b>KEEP A COPY OF THIS FORM.</b> Page 2 (but not this page) must be submitted to the Clerk as part of the post-travel disclosure required by House Rule 25. Travel Regulation § 404(d) also requires you to keep a copy of all request forms and

If there are any questions regarding this form, please contact the Committee on Ethics at 202-225-7103 or via e-mail: travel.requests@mail.house.gov.

supporting paperwork for three subsequent Congresses from the date of travel.

## TRAVELER FORM

1.	Name of Traveler: Kyle Klein
2.	Sponsor(s) who will be paying or providing in-kind support for the trip:  Stanford University
3.	City and State OR Foreign Country of Travel : Stanford, CA
4.	a. Date of Departure: August 8, 2022 Date of Return: August 11, 2022
	b. Yes No Will you be extending the trip at your personal expense?
	If yes, list dates at personal expense:
5.	a. Yes No Will you be accompanied by a family member at the sponsor's expense? If yes:
	(1) Name of Accompanying Family Member:
	(2) Relationship to Traveler: Spouse Child Cother (specify):
	(3) Yes No Accompanying Family Member is at least 18 years of age:
6.	a. Yes No Did the trip sponsor answer "Yes" to Question 8(c) on the <i>Primary Trip Sponsor Form</i> (i.e., travel is sponsored by an entity that employs a registered federal lobbyist or a foreign agent)?
	b. If yes, and you are requesting lodging for two nights, explain why the second night is warranted:
7.	Yes No Primary Trip Sponsor Form is attached, including agenda, invitee list, and any other attachments and Additional Sponsor Forms.
	NOTE: The agenda should show the traveler's individual schedule, including departure and arrival times and identify the specific events in which the traveler will be participating.
8.	Explain why participation in the trip is connected to the traveler's individual official or representational duties. Staff should include their job title and how the activities on the itinerary relate to their duties.
	As Staff Director of the Homeland Security Committee, this trip will give me important exposure and insight into the field of artificial intelligence. Al is an increasingly common issue facing policymakers, including the Committee as it oversees the Department of Homeland Security and its components. This trip will allow me to better understand the issue through the lense of supporting the legislative and oversight work of the Committee Members and staff.
9.	Yes No Is the traveler aware of any registered federal lobbyists or foreign agents involved planning, organizing, requesting, or arranging the trip?
10	. For staff travelers, to be completed by your employing Member:
	ADVANCED AUTHORIZATION OF EMPLOYEE TRAVEL
di tra	nereby authorize the individual named above, an employee of the U.S. House of Representatives who works under my rect supervision, to accept expenses for the trip described in this request. I have determined that the above-described avel is in connection with my employee's official duties and that acceptance of these expenses will not create the opearance that the employee is using public office for private gain.
Si	gnature of Employing Member  Date 7/8/2022

### PRIMARY TRIP SPONSOR FORM

This form should be completed by private entities offering to provide travel or reimbursement for travel to House Members, officers, or employees under House Rule 25, clause 5. A completed copy of the form (and any attachments) should be provided to each invited House Member, officer, or employee, who will then forward it to the Committee together with a *Traveler Form* at least 30 days before the start date of the trip. The trip sponsor should *NOT* submit the form directly to the Committee. The Committee website (ethics.house.gov) provides detailed instructions for filling out the form.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001. Failure to comply with the Committee's Travel Regulations may also lead to the denial of permission to sponsor future trips.

га	titure to comply with the Committee's Travel Regulations may also lead to the denial of permission to sponsor future trips.
1.	Sponsor who will be paying for the trip:
	Stanford University
2.	✓ I represent that the trip will not be financed, in whole or in part, by a registered federal lobbyist or foreign agent. Signify that the statement is true by checking box.
3.	Check only one. I represent that:
	a. The primary trip sponsor has not accepted from any other source, funds intended directly or indirectly to finance any aspect of the trip: OR
	b. The trip is arranged without regard to congressional participation and the primary trip sponsor has accepted funds only from entities that will receive a tangible benefit in exchange for those funds: OR
	c. The primary trip sponsor has accepted funds from other source(s) intended directly or indirectly to finance all or part of this trip and has enclosed disclosure forms from each of those entities.
	If "c" is checked, list the names of the additional sponsors:
4.	Provide names and titles of <b>ALL</b> House Members <i>and</i> employees you are inviting. <b>For each House invitee</b> , <b>provide an explanation of why the individual was invited</b> (include additional pages if necessary):
	See attached
5.	Yes No Is travel being offered to an accompanying family member of the House invitee(s)?
6.	Date of departure: August 8, 2022 Date of return: August 11, 2022
7.	a. City of departure: Washington, DC
	b. Destination(s): Stanford University, Stanford, CA
	c. City of return: Washington, DC
8.	
	a. The sponsor of the trip is an institution of higher education within the meaning of section 101 of the Higher Education Act of 1965: OR
	b. The sponsor of the trip does not retain or employ a registered federal lobbyist or foreign agent: OR
	c. The sponsor employs or retains a registered federal lobbyist or foreign agent, but the trip is for attendance at a one-day event <i>and</i> lobbyist / foreign agent involvement in planning, organizing, requesting, or arranging the trip was <i>de minimis</i> under the Committee's travel regulations.
9.	Check only one of the following:
	a. I checked 8(a) or (b) above; OR
	b. I checked 8(c) above but am not offering any lodging; OR
	c. I checked 8(c) above and am offering lodging and meals for one night; OR
	d. I checked 8(c) above and am offering lodging and meals for two nights. If you checked this box, explain why the second night of lodging is warranted:

0.	Attached is a detailed agenda of the activities House invitees will be participating in during the travel (i.e., an hourly description of planned activities for trip invitees). <i>Indicate agenda is attached by checking box</i> .
1.	Check only one of the following:  a. I represent that a registered federal lobbyist or foreign agent will not accompany House Members or employees on any segment of the trip. Signify that the statement is true by checking box; OR
	b. Not Applicable. Trip sponsor is a U.S. institution of higher education.
2.	For <i>each</i> sponsor required to submit a sponsor form, describe the sponsor's interest in the subject matter of the trip <i>and</i> its role in organizing and/or conducting the trip:
	Stanford University is the sole sponsor of the trip, a 501(C)3 and an institution of higher education. Stanford seeks to promote the public welfare by exercising an influence on behalf of humanity through rigorous scholarship. Through briefings and learning engagements, Stanford faculty will provide congressional staff with the critical thinking skills related to tech policy.
3.	Answer parts a and b. Answer part c if necessary:
	a. Mode of travel: Air Rail Bus Car Other (specify:)
	b. Class of travel: Coach Business First Charter Other (specify:)
	c. If travel will be first class, or by chartered or private aircraft, explain why such travel is warranted:
4.	✓ I represent that the expenditures related to local area travel during the trip will be unrelated to personal or recreational activities of the invitee(s). Signify that the statement is true by checking the box.
.5.	Check only one. I represent that either:  a. The trip involves an event that is arranged or organized without regard to congressional participation and that meals provided to congressional participants are similar to those provided to or purchased by other event attendees; OR
	b. The trip involves events that are arranged specifically <i>with regard</i> to congressional participation. If "b" is checked:
	1) Detail the cost <i>per day</i> of meals (approximate cost may be provided):
	Meals planned will comply with GSA per diem rates
	2) Provide the reason for selecting the location of the event or trip:
	The location of Stanford's campus will allow California based faculty to participate
6.	Name, nightly cost, and reasons for selecting each hotel or other lodging facility:
	Hotel Name: The Sheraton City: Palo Alto Cost Per Night: \$245
	Reason(s) for Selecting: Across from Stanford's campus
	Hotel Name: City: Cost Per Night:
	Reason(s) for Selecting:
	Hotel Name: City: Cost Per Night:
	Reason(s) for Selecting:
7	I represent that all expenses connected to the trip will be for actual costs incurred and not a per diem or lump sum

payment. Signify that the statement is true by checking the box.

### 18. Total Expenses for each Participant:

Actual Amounts Good Faith Estimates	Total Transportation	Total Lodging Expenses	Total Meal Expenses
	Expenses per Participant	per Participant	per Participant
For each Member,	\$1000	\$735	\$495
Officer, or Employee	Economy Airfare	3 nights x \$245	3 x \$165 per diem rate
For each Accompanying Family Member			

	Other Expenses (dollar amount per item)	Identify Specific Nature of "Other" Expenses (e.g., taxi, parking, registration fee, etc.)
For each Member, Officer, or Employee	\$200	Ground transportation
For each Accompanying Family Member		

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

- 19. Check only one:
  - a. I certify that I am an officer of the organization listed below; OR
  - b. Not Applicable. Trip sponsor is an individual or a U.S. institution of higher education.
- 20. I certify by my signature that
  - a. I read and understand the Committee's Travel Regulations;
  - b. I am not a registered federal lobbyist or registered foreign agent; and
  - c. The information on this form is true, complete, and correct to the best of my knowledge.

Signature:	Date: 07/05/2022
Name: Russell Wald	Title: Director of Policy
Organization: Stanford University	4
Address: 450 Jane Stanford Way, Stanford, CA 94305	
Email: rwald@ stanford.edu	Telephone: (202) 630-2724

#### **INSTRUCTIONS**

Complete the *Primary Trip Sponsor Form* and submit the agenda, invitation list, any attachments, and any *Additional Trip Sponsor Forms* directly to the Travelers.

Written approval from the Committee on Ethics is required before traveling on this trip. The Committee on Ethics will notify the House invitees directly and will not notify the trip sponsors.

Willful or knowing misrepresentation on this form may be subject to criminal prosecution under 18 U.S.C. § 1001. Signatures must comply with section 104(bb) of the Travel Regulations.

For questions, please contact the Committee on Ethics at:

1015 Longworth House Office Building Washington, D.C. 20515

ethicscommittee@mail.house.gov | 202-225-7103 More information and forms available at ethics.house.gov



## U.S. House of Representatives

# COMMITTEE ON ETHICS Washington, DC 20515

August 5, 2022

Mr. Kyle Klein Committee on Homeland Security 117 Ford House Office Building Washington, DC 20515

Dear Mr. Klein:

Pursuant to House Rule 25, clause 5(d)(2), the Committee on Ethics hereby approves your proposed trip to Stanford, California, scheduled for August 8 to 11, 2022, sponsored by Stanford University.

You must complete an Employee Post-Travel Disclosure Form (which your employing Member must also sign) and file it, together with a Sponsor Post-Travel Disclosure Form completed by the trip sponsor, with the Clerk of the House within 15 days after your return from travel. As part of that filing, you are also required to attach a copy of this letter and both the Traveler and Primary Trip Sponsor Forms (including attachments) you previously submitted to the Committee in seeking pre-approval for this trip. If you are required to file an annual Financial Disclosure Statement, you must also report all travel expenses totaling more than \$415 from a single source on the "Travel" schedule of your annual Financial Disclosure Statement covering this calendar year. Finally, Travel Regulation § 404(d) also requires you to keep a copy of all request forms and supporting information provided to the Committee for three subsequent Congresses from the date of travel.

If you have any further questions, please contact the Committee's Office of Advice and Education at extension 5-7103.

Sincerely,

Theodore E. Deutch Chairman Michael Guest Acting Ranking Member

TED/MG:amr



July 5, 2022

Dear Mr. Kyle Klein,

On behalf of the Stanford Institute for Human-Centered Artificial Intelligence (HAI), I am pleased to invite you to the inaugural Stanford Congressional Boot Camp on Artificial Intelligence. The Boot Camp will take place August 8-11, 2022 at Stanford University.

Emerging digital technologies will be among the most consequential forces of the 21st century: they will transform economies, challenge legal and political norms, and reconfigure society. Governments attempting to navigate this era will adapt regulatory regimes, social safety nets, fiscal policies, taxation, and foreign affairs as digital technologies reshape labor markets, the industrial structure, the distribution of economic rewards, and the global balance of power.

We know that Congressional staff play a key role in shaping and developing policy on critical technology areas such as artificial intelligence (AI). Rapid advancements in AI make it challenging for many to keep up with a quickly evolving field. That is why the Stanford Institute for Human-Centered AI (HAI) specifically designed the Congressional Boot Camp on Artificial Intelligence to explore the latest in AI developments, equipping participants with the comprehensive knowledge needed to think critically about regulating and governing this emerging technology.

The bicameral, bi-partisan Boot Camp consists of many sessions unpacking what AI means for international security, future of work, healthcare, and includes field trips to Stanford labs for interactive experiences. Each session will feature world-class scholars from Stanford University, leaders from Silicon Valley, and pioneers from civil society organizations.

We hope you will accept this invitation to join us in-person in August. To formally join us, you must fill out the participation form, turn in your ethics paperwork by Friday, July 8th, and alert HAI's Policy Program Manager, Tina Huang, (tina.huang@stanford.edu), that you have done so. In the meantime, please mark your calendars and contact Tina if you have any questions. We look forward to welcoming to Stanford's campus, "the Farm," this August.

Sincerely,

Russell C. Wald Director of Policy

Stanford University 450 Jane Stanford Way, Stanford, CA 94305-2004





## **BOOT CAMP AGENDA**

#### **MONDAY, AUGUST 8, 2022**

11:15am – 11:30am **Welcome**Speakers: John Robichaux, Russell Wald

11:30am – 12:30pm Session 1: Mapping the Al Landscape

Speaker: Peter Norvig

12:30pm – 1:30pm Session 2: Mitigating Risk: Implementing Safe and Robust Al

Speakers: Anthony Corso, Mykel Kochenderfer

1:30pm – 1:45pm **Break** 

1:45pm - 2:45pm Session 3: The Fuel of Al: Data (and Its Perils)

Speakers: Terah Lyons, Jennifer King, James Zou

2:45pm - 3:30pm Session 4: Al, Automation, and the Future of Work

Speaker: Erik Brynjolfsson

3:30pm - 3:45pm Break/Walk to Gates

3:45pm - 4:45pm Session 5: Understanding the Basics of Foundation Models

Speakers: Rishi Bommasani, Percy Liang

4:45pm - 5:30pm Keynote Fireside Chat: Cutting Edge: Al Developments That Are Steering the Future

Speakers: Fei-Fei Li, James Manyika

5:30pm - 7:00pm Dinner

### **TUESDAY, AUGUST 9, 2022**

8:30am - 9:00am Breakfast/Debrief

Speakers: John Robichaux, Russell Wald

9:00am - 10:00am Session 1: How Al Will Shape the Future of International Security and U.S. Intelligence

Speakers: Brad Boyd, Harold Trinkunas, Amy Zegart

10:00am - 10:15am Break

10:15am - 11:15am Session 2: Digital Dupes: How AI is Distorting Truth Through Disinformation and Deepfakes

Speakers: Andrew Grotto, Riana Pfefferkorn

11:15am – 12:15pm Session 3: The China Challenge: Developing Human-Centered AI

with an Authoritarian Competitor

Speakers: Oriana Mastro, Graham Webster, Daniel Zhang





12:15pm – 1:00pm	Lunch
1:00pm – 2:00pm	Session 4: The Possibilities and Pitfalls of Al and Climate Sustainability Speakers: Marshall Burke, Rayne Sullivan
2:00pm – 4:00pm	Hotel Break
4:00pm – 5:00pm	Session 5: From Startups to Giants: Industry Perspectives on Innovation Speakers: Jack Clark, Vilas Dhar, Rachel Gillum, John Hennessy, Susan Liautaud
5:00pm – 6:00pm	Reception
6:00pm – 7:30pm	Keynote Dinner: Democracy in a World of Al-Fueled Disinformation and Digital Authoritarianism Speakers: Francis Fukuyama, Daniel Ho, Condoleezza Rice

## WEDNESDAY, AUGUST 10, 2022

8:30am – 9:00am	Breakfast/Debrief Speakers: John Robichaux, Russell Wald
9:00am – 10:00am	Session 1: Revolutionizing the Classroom: How Al Is Advancing Education Speakers: Emma Brunskill, John Robichaux, Dan Schwartz
10:00am – 11:00am	Session 2: The New Creative Industry: How AI Is Reshaping Arts and Culture Speakers: Michele Elam, Kamal Sinclair
11:00am – 11:15am	Break
11:15am – 12:15pm	Session 3: Transforming Healthcare Through Innovation Speakers: Alyce Adams, Matthew Lungren, Sherri Rose
12:15pm – 1:30pm	Session 4 (Lunch): Modernizing a Mammoth: Use-Cases of Public Sector Al Speaker: Daniel Ho
1:30pm – 1:45pm	Break
1:45pm – 2:45pm	Closing Keynote Session 5: The Neuroscience of Addiction and Implications for a Digital World Speakers: Jennifer King, Anna Lembke
2:45pm – 4:15pm	Session 6: Trip to Stanford Virtual Human Interaction Lab Speaker: Jeremy Bailenson
4:15pm – 4:30pm	Walk to Gates
4:30pm – 6:30pm	Closing Dinner Speaker: Tina Huang



## **SESSION DESCRIPTIONS:**

#### DAY 1: MONDAY, AUGUST 8, 2022

#### 11:15am -11:30am

#### **Welcome Session and Lunch**

This session will welcome staffers to Stanford's campus and provide an overview of why this boot camp was created and what Stanford HAI hopes for participants to gain.

#### Speakers:



John Robichaux,
Director of Education,
Stanford HAI

John Robichaux is an award-winning executive and educator with 25plus years of expertise

in advising, building, and growing high-impact organizations within the public, corporate, and philanthropic sectors. Robichaux has also served in senior leadership positions at Harvard and Columbia, and elsewhere at Stanford, as well as a consultant and adviser to 200-plis organizations worldwide in the areas of strategic and executive leadership, organizational and policy design, change leadership, and social impact. Robichaux also founded and codirected a large international NGO and nonprofit.

Within higher education, Robichaux is widely recognized as the only active administrator to have held leadership positions at three "Ivy Plus" universities in six key areas of university leadership. In 2017, NAASS recognized Robichaux's innovation and impact on higher education leadership, describing "The Robichaux Method" as "15 ideas that changed everything" in those fields. He regularly consults for global organizations with a special emphasis on training executives, strategic planning efforts, and change management.



Russell Wald, Director of Policy, Stanford HAI

Russell Wald leads the policy team at Stanford HAI that advances the organization's engagement with U.S. and

international governments and civil society organizations. In this leadership capacity, Wald sets the strategic vision for policy research, education, and outreach at HAI, and directs a dynamic team to equip policymakers with the knowledge and resources to take informed and meaningful actions on advancing AI with ethical and human-centered values.

He is the co-author of various publications on Al including, Building a National Al Research Resource (2021), Enhancing International Cooperation in Al Research: The Case for a Multilateral Al Research Institute (2022), The Centrality of Data and Compute for Al Innovation: A Blueprint for a National Research Cloud (forthcoming: Notre Dame Journal of Emerging Technologies).

He has held various policy program and government relations positions at Stanford University for nearly a decade. In 2014, he co-led the inaugural Stanford congressional boot camp, establishing a strong and effective tradition of educating policymakers at Stanford and enhancing the collaboration between governments and academic institutions.



#### 11:30am -12:30pm

#### Session 1: Mapping the Al Landscape

This session will cover the basic concepts of AI, including compute power, neural networks, narrow vs. general AI, gradient descent, and more. It will also provide a bird's-eye view of the AI landscape, covering different AI techniques such as deep learning, computer vision, natural language processing, and supervised and unsupervised learning. Participants will walk away with a greater understanding of the primary aspects of AI and be better prepared for the boot camp.

#### Speaker:



Peter Norvig, Distinguished Education Fellow, Stanford HAI; Director of Research, Google

Peter Norvig previously directed Google's core search algorithms group and Google's research group. He was head of NASA Ames's Computational Sciences Division, where he was NASA's senior computer scientist and a recipient of NASA's Exceptional Achievement Award in 2001. He has taught at the University of Southern California, Stanford University, and the University of California at Berkeley, from which he received a Ph.D. in 1986 and the distinguished alumni award in 2006. He was co-teacher of an artificial intelligence

class that signed up 160,000 students, helping to kick off the current round of massive open online classes. His publications include the books *Data Science in Context*, *Artificial Intelligence: A Modern Approach* (the leading textbook in the field), *Paradigms of AI Programming: Case Studies in Common Lisp*, *Verbmobil: A Translation System for Face-to-Face Dialog*, and *Intelligent Help Systems for UNIX*.

#### 12:30pm - 1:30pm

#### Session 2: Mitigating Risk: Implementing Safe and Robust Al

The consequences of deploying robust AI and decision-making technologies in safety-critical systems such as driverless vehicles and autonomous aircraft are enormous. Challenges for AI developers range from biased inputs, constantly evolving conditions, and explainability issues, among others. This session will discuss the obstacles developers face as well as the difficult—and often politically fraught—decisions they make around operational efficiency and how they define acceptable risk parameters.

#### Speakers:



Anthony Corso,
Executive Director, Stanford
Center for Al Safety;
Aeronautics and Astronautics
Postdoctoral Researcher,
Stanford University

Anthony Corso is a postdoctoral researcher in the aeronautics and astronautics department at Stanford University, where he is advised by Professor Mykel Kochenderfer in the Stanford Intelligent Systems Laboratory (SISL). He is the executive director of the Stanford Center for Al Safety and the associate director of research for the SAIL-Toyota Center. His current research is on developing verifiably robust autonomy for aviation applications as part of the NASA University Leadership Initiative. His dissertation work studied approaches for the validation of safety-critical autonomous systems with an emphasis on interpretability and scalability. His research interests also include reinforcement learning, optimization, transfer learning, fluid and plasma simulation. In 2014 he received a B.S. in physics from Harvey Mudd College with an emphasis on computational methods, and in 2016 he received his master's in aeronautics and astronautics from Stanford. He is a recipient of the Stanford Graduate Fellowship and the Nicholas J. Hoff Award for outstanding performance as a master's student.



Mykel Kochenderfer,
Associate Professor of
Aeronautics and Astronautics
and, by courtesy, of
Computer Science, Stanford
University; Faculty Affiliate,
Stanford HAI

Mykel Kochenderfer previously worked at the MIT Lincoln Laboratory where he focused on airspace modeling and aircraft collision avoidance, with his early work leading to the establishment of the ACAS X program. He received a Ph.D. from the University of Edinburgh and B.S. and M.S. degrees in computer science from Stanford University. Kochenderfer is the director of the Stanford Intelligent Systems Laboratory (SISL), conducting research on advanced algorithms and analytical methods for the design of robust decision-making systems. Of particular interest are systems for air traffic control, unmanned aircraft, and other aerospace applications where decisions must be made in uncertain, dynamic environments while maintaining safety and efficiency. Research at SISL focuses on efficient computational methods for deriving optimal decision strategies from highdimensional, probabilistic problem representations.



#### 1:45pm - 2:45pm

#### Session 3: The Fuel of AI: Data (and Its Perils)

Contemporary AI technologies run on data, but AI developers face significant obstacles in acquiring and cleaning data. In addition, developers must do their best to ensure data's inherent biases (and their non-obvious proxies) are accounted for in their AI systems. Moreover, different social values around privacy, data ownership, and data creation impact what AI technologies are possible. This session will dive into how the data policies developed today will shape the technologies of tomorrow.

#### Speakers:



Terah Lyons (moderator), Executive In Residence, Zetta Venture Partners: Member of the Al Index Steering Committee and Affiliated Fellow, Stanford HAI

Terah Lyons was the Founding

Executive Director of the Partnership on AI, a multistakeholder non-profit initiative focused on advancing the benefits and addressing the challenges of artificial intelligence co-founded by a coalition of technology companies, civil society organizations, and academic experts in 2016.

Previously, Terah was a Policy Advisor to the U.S. Chief Technology Officer in the White House Office of Science and Technology Policy (OSTP) during the Obama Administration. In her capacity at the White House, Terah led a policy portfolio focused on machine intelligence, including Al, robotics, and intelligent transportation systems. In her work at OSTP, she helped establish and direct the White House Future of Artificial Intelligence Initiative, which framed a U.S. Government-wide domestic policy strategy on Al.

Terah currently sits on the Study Panel for Stanford's One Hundred Year Study on Artificial Intelligence (Al100), and on the Steering Committee of the Al Index hosted at Stanford's Human-Centered Al Institute.



<u>Jennifer King</u>, Privacy and Data Policy Fellow, Stanford HAI

Jennifer King, an information scientist by training, is a recognized expert and scholar in information

privacy. Sitting at the intersection of human-computer interaction, law, and the social sciences, her research examines the public's understanding and expectations of online privacy as well as the policy implications of emerging technologies. Most recently, her research explored alternatives to notice and consent (with the World Economic Forum), the impact of California's new privacy laws, and dark patterns. Her past work includes projects focusing on social media, genetic privacy, mobile application platforms, the Internet of Things (IoT), and digital surveillance. Her scholarship has been recognized for its impact on policymaking by the Future of Privacy Forum, and she has been an invited speaker before the Federal Trade Commission at several commission workshops. King completed both her PhD and master's degree in information management and systems at the University of California, Berkeley School of Information.



1:45pm - 2:45pm Session 3, continued

#### Speakers:



<u>James Zou</u>, Assistant Professor of Biomedical Data Science, Stanford University; Faculty Affiliate, Stanford HAI

James Zou is also a Chan-Zuckerberg investigator, and the faculty director of Stanford Al for Health. As a technologist, Zou develops novel machine learning algorithms that have strong statistical guarantees and are motivated by human health challenges. Several of his methods are widely used in industry—including in tech, biotech, insurance, and more. He also works on questions important for the broader impacts of Al—fairness, accountability,

interpretations, robustness, and the economic impacts of data and AI to firms and industry.

#### 2:45pm - 3:30pm

#### Session 4: AI, Automation, and the Future of Work

Al and automation will have a rippling effect on today's workforce and the future of work. Mainstream narratives forecast Al will displace workers and funnel profits up to a select few. Alternatively, Al has the potential to augment and supercharge labor, ensuring the benefits of Al are spread and enjoyed widely. This session dives into deeper detail regarding what exactly we should expect as Al and automation integrate into the economy and the subsequent consequences for the workforce. The panelists will also discuss how policies can reshape and guide what the future holds.

#### Speaker:



<u>Erik Brynjolfsson</u>, Director, Stanford Digital Economy Lab; Jerry Yang and Akiko Yamazaki Professor and Senior Fellow, Stanford HAI; Ralph Landau Senior Fellow, Stanford Institute for Economic Policy Research

Erik Brynjolfsson is the Jerry Yang and Akiko Yamazaki Professor and Senior Fellow at the Stanford Institute for Human-Centered AI, and Director of the Stanford Digital Economy Lab. He is the Ralph Landau Senior Fellow at the Stanford Institute for Economic Policy Research (SIEPR) and holds appointments at the Stanford Graduate School of Business and Stanford

Department of Economics and as a Research Associate at the National Bureau of Economic Research (NBER).

One of the most-cited authors on the economics of information, Brynjolfsson was among the first researchers to measure productivity contributions of IT and the complementary role of organizational capital and other intangibles. He has done pioneering research on digital commerce, the Long Tail, bundling and pricing models, intangible assets, and the effects of IT on business strategy, productivity, and performance.



3:30pm - 3:45pm

**Break/Walk to Gates** 

#### 3:45pm - 4:45pm

#### Session 5: Understanding the Basics of Foundation Models

Recently, a new successful paradigm for building AI systems has emerged: train one model on a huge amount of data and adapt it to numerous applications. We have deemed such a model a *foundation model*. This session unpacks how foundation models were created and deployed, the requirements to build one, expected and unexpected consequences of these models, and other hot topics surrounding the use of large AI models.

#### Speakers:



Rishi Bommasani,
Computer Science PhD
Candidate, Stanford
University

Rishi Bommasani is a secondyear Ph.D. student in the department of computer

science at Stanford University advised by Percy Liang and Dan Jurafsky. Bommasani helped build and currently helps organize the Stanford Center for Research on Foundation Models (CRFM). He is also affiliated with Stanford NLP and Stanford Al. Bommasani's graduate studies are funded by the National Science Foundation Graduate Research Fellowship Program (NSF GRFP).

Bommasani earned a B.A. in mathematics and computer science and an M.S. in computer science from Cornell University, where he was advised by Claire Cardie.

His research focuses on understanding AI systems and their societal impact, as well as using NLP to further scientific inquiry.



Percy Liang,
Associate Professor of
Computer Science, Stanford
University; Director, Stanford
Center for Research on
Foundation Models; Faculty
Affiliate, Stanford HAI

Percy Liang is an associate professor of computer science at Stanford University (B.S. from MIT, 2004; Ph.D. from UC Berkeley, 2011). He is also the director of the Center for Research on Foundation Models at Stanford. His two research goals are to make machine learning more robust, fair, and interpretable; and to make computers easier to communicate with through natural language. His awards include the Presidential Early Career Award for Scientists and Engineers (2019), IJCAI Computers and Thought Award (2016), an NSF CAREER Award (2016), a Sloan Research Fellowship (2015), and a Microsoft Research Faculty Fellowship (2014).



4:45pm - 5:30pm

#### Keynote Fireside Chat: Cutting Edge: Al Developments That Are Steering the Future

The rapid advancements in AI in recent years have shocked the world. From models generating realistic images from scratch to ambient technologies that enhance the human condition, the possibilities of what AI can do for humanity are endless. Understanding today's cutting-edge AI will help steer tomorrow's innovation. This session will dive into what is on the horizon of AI advancements and how these technologies can be leveraged to benefit society.

#### Speakers:



Fei-Fei Li,
Sequoia Professor of
Computer Science, Stanford
University; Denning CoDirector, Stanford HAI
See biography on page 14.



James Manyika,
Vice Chair, National Artificial
Intelligence Advisory
Committee; Senior Vice
President of Technology
and Society, Google;
Advisory Council Member
and Distinguished Fellow,
Stanford HAI
See biography on page 15.

5:30pm - 7:00pm

Dinner

#### DAY 2: TUESDAY, AUGUST 9, 2022

8:30am - 9:00am

#### Breakfast/Debrief

Stanford HAI staff will lead a discussion debriefing the key concepts that staffers learned in earlier sessions. They will also offer a preview of Day 2 and leave ample time for questions.

#### Speakers:



John Robichaux,
Director of Education,
Stanford HAI
See biography on page 19.



Russell Wald,
Director of Policy,
Stanford HAI
See biography on page 19.

9:00am - 10:00am

Session 1: How AI Will Shape the Future of International Security and U.S. Intelligence
Spying has never been more ubiquitous—or less understood. This crisis in intelligence education is fueling conspiracy theories and hurting intelligence policy. At the same time, AI is introducing new opportunities to strengthen U.S. intelligence capabilities, but only if decision makers understand how the U.S. intelligence community and AI technologies actually work. This session will separate fact from fiction as panelists discuss the past, present, and future of American espionage and how AI is creating an adapt-or-fail moment for U.S. intelligence agencies.

#### Speakers:



Brad Boyd (moderator), Visiting Fellow, Hoover Institution

Brad Boyd's research interests focus on the integration of emerging technology into warfare and national security. Boyd is particularly interested in the rise of automation and autonomy in military systems, to include decision making, planning, information operations, enterprise operations, and weaponry. Boyd also looks at the way U.S., Chinese, and Russian military integration of emerging technology affects military, economic, and social stability.

Prior to joining Hoover, Boyd served as a defense and foreign policy adviser to Sen. Angus King and as Senator King's representative to the Cyberspace Solarium Commission. Boyd also served as the director of Al-enabled warfighting capability development at the U.S. Department of Defense's Joint Artificial Intelligence Center and as the director of Gen. Mark A. Milley's coordination group.

Boyd was a senior military fellow at Stanford's Center for International Security and Cooperation and a Seminar XXI Fellow at the Massachusetts Institute of Technology.





9:00am - 10:00am Session 1, continued

#### Speakers:



Harold Trinkunas,
Deputy Director and Senior
Research Scholar, Stanford
Center for International
Security and Cooperation

Harold Trinkunas previously served as the Charles W.

Robinson Chair and senior fellow and director of the Latin America Initiative in the Foreign Policy program at the Brookings Institution. His research focuses on issues related to foreign policy, governance, and security, particularly in Latin America. Trinkunas has written on emerging powers and the international order, ungoverned spaces, terrorism financing, borders, and information operations.

Trinkunas also served as an associate professor and chair of the department of national security affairs at the Naval Postgraduate School in Monterey, California. He received his doctorate in political science from Stanford University in 1999. He was born in Maracaibo, Venezuela.



Amy Zegart,
Morris Arnold and Nona
Jean Cox Senior Fellow,
Hoover Institution; Senior
Fellow, Stanford Freeman
Spogli Institute for
International Studies; Chair,
Steering Committee on

International Security, Stanford HAI

Amy Zegart specializes in U.S. intelligence, emerging technologies and national security, grand strategy, and global political risk management.

Zegart has been featured by the *National Journal* as one of the 10 most influential experts in intelligence reform. Most recently, she served as a commissioner on the 2020 CSIS Technology and Intelligence
Task Force and has advised the National Security
Commission on Artificial Intelligence. She served on the Clinton administration's National Security Council staff and as a foreign policy adviser to the Bush 2000 presidential campaign. She has testified before the Senate Select Committee on Intelligence and advised senior officials on intelligence, homeland security, and cybersecurity matters.

10:00am - 10:15am

Break



#### 10:15am - 11:15am

## Session 2: Digital Dupes: How AI Is Distorting Information Through Disinformation and Deepfakes

The rapid spread of disinformation has challenged societies and deepened mistrust, threatening to erode democratic values. Furthermore, synthetic media from the advent of generative adversarial networks (GANS) has created deceptively realistic images and videos—known as deepfakes—that are indistinguishable from reality. These developments are leading to an information crisis where consumers are becoming less certain of the veracity of the content they encounter. This session will dive into how AI has changed the information economy and how policy can help protect people from fake content.

#### Speakers:



Andrew Grotto,
Director, Program on
Geopolitics, Technology,
and Governance,
Stanford Center for
International Security and
Cooperation; William J.
Perry International Security

Fellow, Stanford Cyber Policy Center; Research Fellow, Hoover Institution

Andrew Grotto's research interests center on the national security and international economic dimensions of America's global leadership in information technology innovation, and its growing reliance on this innovation for its economic and social life. He is particularly interested in the allocation of responsibility between the government and the private sector for defending against cyber threats, especially as it pertains to critical infrastructure; cyber-enabled information operations as both a threat to and a tool of statecraft for liberal democracies; opportunities and constraints facing offensive cyber operations as a tool of statecraft, especially those relating to norms of sovereignty in a digitally connected world; and governance of global trade in information technologies.

Before coming to Stanford, Grotto was the senior director for cybersecurity policy at the White House in both the Obama and Trump administrations.



Riana Pfefferkorn, Research Scholar, Stanford Internet Observatory

Riana Pfefferkorn investigates the U.S. and other governments' policies and practices for forcing

decryption and/or influencing the security design of online platforms and services, devices, and products, both via technical means and through the courts and legislatures. Riana also studies novel forms of electronic surveillance and data access by U.S. law enforcement and their impact on civil liberties.

Previously, Pfefferkorn was the associate director of surveillance and cybersecurity at the Stanford Center for Internet and Society, where she remains an affiliate. Prior to joining Stanford, she was an associate in the internet strategy & litigation group at the law firm of Wilson Sonsini Goodrich & Rosati, and a law clerk to the Hon. Bruce J. McGiverin of the U.S. District Court for the District of Puerto Rico.



#### 11:15am - 12:15pm

## Session 3: The China Challenge: Developing Human-Centered Al with an Authoritarian Competitor

China remains one of the most complex geopolitical challenges for the United States. The Chinese government has made clear its intention to be the leader in Al and other key dualuse technologies to secure an economic, political, and military advantage. Furthermore, the Chinese Communist Party uses Al technology to commit human rights abuses at home and abroad in a fundamentally anti-democratic manner. How can the U.S. maintain human-centered values in its technology and remain a global leader that advances an international order using technology for society's benefit? This session will dive deeply into the nuances of Sino-American relations and how the U.S. can maintain its technological superiority.

#### Speakers:



Oriana Skylar Mastro, Center Fellow, Stanford Freeman Spogli Institute for International Studies

Oriana Skylar Mastro's research focuses on Chinese military and

security policy, Asia-Pacific security issues, war termination, nuclear dynamics, and coercive diplomacy. She is a non-resident senior fellow at the American Enterprise Institute and continues to serve in the U.S. Air Force Reserve, for which she works as a strategic planner at INDOPACOM.

She has received numerous awards for her military service and contributions to U.S. strategy in Asia, including the 2020 and 2018 Meritorious Service Medal, the 2017 Air Force Recognition Ribbon, and the 2016 Individual Reservist of the Year Award. She has won a number of other prestigious awards, including the 2016-2017 Stanton Nuclear Security Fellowship at the Council of Foreign Relations.



Graham Webster,
Research Scholar and
Editor-in-Chief, DigiChina,
Stanford Cyber Policy Center

Graham Webster is a China digital economy fellow at New America. Based at

Stanford, he leads an inter-organization network of specialists to produce analysis and translation on China's digital policy developments. He researches, publishes, and speaks to diverse audiences on the intersection of U.S.-China relations and advanced technology.

From 2012 to 2017, Webster worked for Yale Law School as a senior fellow and lecturer responsible for the Paul Tsai China Center's Track 2 dialogues between the United States and China, co-teaching seminars on contemporary China and Chinese law and policy, leading programming on cyberspace in U.S.-China relations, and writing extensively on the South China Sea and the law of the sea. He has worked as a consultant to Privacy International, the National Bureau of Asian Research, the Clinton Global Initiative, and the Natural Resources Defense Council's China Program.



11:15am - 12:15pm Session 3, continued

#### Speakers:



Daniel Zhang (moderator), Policy Research Manager, Stanford HAI

Daniel Zhang develops and oversees HAI's policy research programs, including policy briefs, white papers, workshops, and responses to government requests for information. Previously, he was the manager of the AI Index program, where he led the development and research for its annual report that measures and evaluates the rapid rate of AI advancement.

Before Stanford, he worked on global AI talent flows and security risks at the Center for Security and Emerging Technology and public education policy at the Riley Institute Center for Education and Leadership. Zhang holds an M.A. in security studies from Georgetown University, where he concentrated on technology policy, and a B.A. in politics & international affairs from Furman University.

12:15pm - 1:00pm

Lunch



#### 1:00pm - 2:00pm

#### Session 4: The Possibilities and Pitfalls of Al and Climate Sustainability

The risks and threats stemming from global climate change are becoming a growing issue for policymakers. At the same time, the rapid advancements of AI have presented possible opportunities to use this technology to help tackle our greatest climate challenges, from achieving net-zero emissions to preparing for extreme weather events. Conversely, AI continues to increasingly rely on compute power, which is an energy-intensive resource and contributes to the emission of CO2. As a result, there is mounting concern around AI's environmental impact, drawing attention to the cost-benefit analysis of AI advancements. This session will unpack how AI can be used to help confront climate change while also better understanding AI's own ripple effects in the environment.

#### Speakers:



Marshall Burke,
Associate Professor of
Earth System Science,
Stanford University; Deputy
Director, Stanford Center
on Food Security and
the Environment; Senior
Fellow, Stanford Freeman

Spogli Institute for International Studies

Marshall Burke's research focuses on social and economic impacts of environmental change, and on measuring and understanding economic livelihoods across the developing world. His work regularly appears in both economics and scientific journals, including recent publications in *Nature*, *Science*, the *Quarterly Journal of Economics*, and *The Lancet*. He holds a PhD in Agricultural and Resource Economics from UC Berkeley, and a BA in International Relations from Stanford. He is also co-founder of AtlasAI, a start-up using satellites and machine learning to measure livelihoods.



Rayne Sullivan, Graduate Fellow, Stanford HAI

Rayne Sullivan's work focuses on climate change, tech law, Indigenous innovation, and youth advocacy, as well as

nature-based solutions and social entrepreneurship in island communities. At PreCOP26, Sullivan represented the United States at the UN's inaugural Youth4ClimateSummit in Milan.

Sullivan serves as an executive adviser at the Oxford Artificial Intelligence Society (OxAI). At OxAI, he co-developed the initiative on diversity and inclusion, and managed industry relationships with Alphabet's X, QuantumBlack, and other leading firms. Through his research, he analyzed socially responsible AI development as a member of the Rhodes Artificial Intelligence Lab and conducted field research on national innovation strategies in Southeast Asia. Additionally, Sullivan co-founded Georgetown Diplomatic Strategies, a diplomacy nonprofit that engaged with over a dozen embassies and launched a program to increase gender equality in foreign policy.



#### 4:00pm - 5:00pm

#### Session 5: From Startups to Giants: Industry Perspectives on Innovation

Silicon Valley, which is home to venture capital, startups, and leading tech firms, is a global center of tech innovation. From the startup lab to the boardrooms of major companies, this session will bring together startup founders and tech executives to map out Silicon Valley's innovation ecosystem, discuss its vibrancy, and critically think about the consequences of Al developments on society. Panelists will offer their perspectives on starting, funding, and running successful companies as well as providing counsel to companies on ensuring ethical business practices.

#### Speakers:



<u>Jack Clark</u>, Co-Founder, Anthropic; Co-Chair of the Al Index Steering Committee, Stanford HAI

Jack Clark is also co-chair of the OECD's working group on Al and Compute

and a non-resident research fellow at the Center for Security and Emerging Technology (CSET). In his spare time, Clark writes Import AI, a newsletter about AI and AI policy read by more than 25,000 people around the world. Clark was formerly the policy director of OpenAI, an AI research company.



<u>Vilas Dhar</u> (moderator), President and Trustee, Patrick J. McGovern Foundation; Advisory Council Member, Stanford HAI

Vilas Dhar's career has included work as board

director and lead investor in several high impact private companies, acting as CEO and managing partner of a US law firm, building public strategies on digital services, entrepreneurship, and innovation programs, and founding the Next Mile Project, a first-of-its-kind incubator where social change organizations received access to a suite of philanthropically funded customized services to support and scale their impact - leveraging private sector expertise for the public good. The Next Mile Project was acquired in January 2017.

Through his private office, Vilas now manages a global portfolio of direct, venture, and philanthropic investments, advises international entities on social and economic investing strategy, and sits on several public and private sector boards. He has served as the Gleitsman Fellow on Social Change at Harvard University, and as the Entrepreneur-in-Residence at the University of Illinois. He holds a J.D. from NYU School of Law, an M.P.A, from the Harvard Kennedy School, and dual Bachelor's degrees in Biomedical Engineering and Computer Science from the University of Illinois, where he was named University Chancellor's Scholar.



#### 4:00pm - 5:00pm Session 5, continued

#### Speakers:



Rachel Gillum,
Vice President, Ethical and
Humane Use of Technology,
Salesforce; Affiliate, Stanford
Immigration Policy Lab

Rachel Gillum is a leader with experience driving strategic

initiatives within multinational corporations, the U.S. government, and academia, helping organizations understand, navigate, and mitigate geopolitical and ethical risks that can negatively impact society as well as consumer brands.

Gillum is currently Vice President of Salesforce's Office of Ethical & Humane Use of Technology, where she and her team work to ensure Salesforce technologies, including AI, are not used for harm and uphold basic human rights. Reporting directly to the chief ethical & humane use officer, Gillum developed Salesforce's ethical use policy practice, defining and executing on the strategic vision while building out her global team. During her tenure, Gillum has established the company's key policy guardrails to prevent Salesforce technologies from contributing to adverse human rights impacts, and she has scaled policy operations across Salesforce's suite of acquisitions and product offerings globally.

Rachel manages Salesforce's Ethical Use Advisory
Council— a group that includes international experts
from organizations such as the United Nations, Freedom
House, academic institutions and more. Rachel is also an
original member of the the Salesforce Racial Equality &
Justice Taskforce Policy Committee where she and her
colleagues develop principled stances for Salesforce's
government affairs team in support of racial justice and
equality legislative efforts in the United States.

Rachel received her doctorate and master's degrees from Stanford University and her bachelors at the University of Washington in Seattle.



John Hennessy,
President Emeritus, Stanford
University; Chairman of
the Board, Alphabet Inc.;
Advisory Council Member,
Stanford HAI

John Hennessy, professor of electrical engineering and computer science, served as president of Stanford University from September 2000 until August 2016. In 2017, he initiated the Knight-Hennessy Scholars Program, the largest fully endowed graduate-level scholarship program in the world, and he currently serves as director of the program.

Hennessy, a pioneer in computer architecture, joined Stanford's faculty in 1977 as an assistant professor of electrical engineering. In 1981, he focused on a technology known as RISC (reduced instruction set computer), which revolutionized computing by increasing performance while reducing costs. His subsequent research focused on multiprocessor systems, including the DASH and FLASH projects, both of which pioneered concepts now used in industry. He served as chair of Computer Science (1994-1996), dean of the School of Engineering (1996-1999), and university provost (1999-2000) before being appointed as Stanford's 10th president in 2000. As president he focused on increasing financial aid and developing new initiatives in multidisciplinary research and teaching. He was the founding board chair of Atheros Communications, one of the early developers of WiFi technology, and has served on the board of Cisco and Alphabet (Google's parent company).



4:00pm - 5:00pm Session 5, continued

#### Speakers:



<u>Susan Liautaud</u>, Founding and Managing Director, Susan Liautaud & Associates Limited; Advisory Council Member, Stanford HAI

Susan Liautaud is the founder and managing director of Susan Liautaud & Associates Limited, a boutique advisory firm advising global leaders and corporate, nonprofit, academic, and governmental institutions internationally on complex ethics matters. Liautaud is the chair of council (trustees) of the London School of Economics and Political Science. Liautaud also founded a nonprofit collaborative platform for debate on innovative

ethics called The Ethics Incubator. Liautaud teaches cutting-edge ethics courses at Stanford University.

She serves on a number of other boards and advisory boards, including the U.K. government's Centre for Data Ethics and Innovation; U.K. Cabinet Office's Advisory Committee on Business Appointments; the Pasteur Institute; Doctors Without Borders/Médecins Sans Frontières; Care International; SAP AI Ethics Advisory Panel; and the Freeman Spogli Institute for International Affairs at Stanford.

Susan has a PhD in social policy from the London School of Economics and Political Science, a JD from Columbia University Law School, a MA in Chinese studies from the University of London SOAS, and two BAs and a MA from Stanford University.

5:00pm - 6:00pm Reception



#### 6:00pm - 7:30pm

## Keynote Dinner: Democracy in a World of Al-Fueled Disinformation and Digital Authoritarianism

The introduction of AI into society has had ripple effects on governments worldwide. Disinformation spreading on digital platforms—further amplified by AI—has had real-world consequences on democracy. Additionally, authoritarian countries are leveraging AI to further surveil and control their populations. The future of democracy hangs in the balance of making sure AI is used to affirm democratic systems and reinforce norms and values for the betterment of humanity. This dinner discussion will unpack the complexities of AI as it intertwines with different governments and consider how to ensure democracy prevails in a digital world.

#### Speakers:



<u>Daniel Ho</u> (moderator), William Benjamin Scott and Luna M. Scott Professor of Law, Stanford Law School; Director, Stanford Regulation, Evaluation, and Governance Lab; Faculty Associate Director, Stanford HAI; Member, National Artificial Intelligence Advisory Committee

See biography on page 12.



<u>Francis Fukuyama</u>, Olivier Nomellini Senior Fellow, Stanford Freeman Spogli Institute for International Studies; Director, Susan Ford Dorsey Master's in International Policy, Stanford University; Faculty Affiliate, Stanford HAI

See biography on page 11.



<u>Condoleezza Rice</u>, Tad and Dianne Taube Director, Hoover Institution; Denning Professor in Global Business and the Economy, Stanford Graduate School of Business; Advisory Council Member, Stanford HAI

See biography on page 16.



### DAY 3: WEDNESDAY, AUGUST 10, 2022

8:30am - 9:00am

**Breakfast** 

This session will introduce the last day of the boot camp and answer any questions staffers may have.

#### Speakers:



John Robichaux,
Director of Education,
Stanford HAI
See biography on page 19.



Russell Wald,
Director of Policy,
Stanford HAI
See biography on page 19.

9:00am - 10:00am

Session 1: Revolutionizing the Classroom: How AI Is Advancing Education

Al has the potential to dramatically improve education. From teacher support to personalized student engagement, Al could democratize extraordinary teaching and learning. But dangers and concerns loom. Collecting data from children raises privacy concerns, and current inequities in the education system might be exacerbated by the introduction of Al. This session will look into how Al can be leveraged to improve the education system without causing harm to teachers and students.

#### Speakers:



<u>Emma Brunskill</u>, Associate Professor of Computer Science, Stanford University; Faculty Affiliate, Stanford HAI

Emma Brunskill's research interest is to create robust AI systems, particularly in the healthcare and education sectors, that learn from a few samples. Brunskills's lab is part of the Stanford AI Lab, the Stanford Statistical ML group, and AI Safety @Stanford. Previously, Brunskill was an assistant professor at Carnegie Mellon University. Her work has been honored by early faculty career awards (National Science Foundation, Office of Naval

Research, Microsoft Research), and she has received several best research paper nominations (CHI, EDMx3) and awards (UAI, RLDM, ITS).



<u>John Robichaux</u> (moderator), Director of Education, Stanford HAI See biography on page 19.



9:00am - 10:00am Session 1, continued

#### Speakers:



<u>Daniel L. Schwartz</u>, I. James Quillen Dean and Nomellini & Olivier Professor of Educational Technology, Stanford University; Faculty Affiliate, Stanford HAI

Daniel L. Schwartz leads Stanford's Transforming Learning Accelerator, a major interdisciplinary initiative advancing the science and design of learning to bring effective and equitable solutions to the world. An expert in human learning and educational technology, Schwartz also oversees a laboratory that creates pedagogy, technology, and assessments that prepare students to continue learning and adapting throughout their

lifetimes. He has taught math in rural Kenya, English in south-central Los Angeles, and multiple subjects in Kaltag, Alaska. As co-host of the Stanford podcast and SiriusXM radio show School's In, Schwartz discusses current topics in teaching and learning with the aim of helping educators and parents understand and use the latest research. He is author of *The ABCs of How We Learn: 26 Scientifically Proven Approaches, How They Work, and When to Use Them.* 



## 10:00am - 11:00am Session 2: The New Creative Industry: How Al Is Reshaping Arts and Culture

Artististic and cultural expression is one of the hallmarks of advanced societies. Today we understand the intersection of arts and culture with wellness, innovation, creativity, diversity, and health. Al is expanding artistic and cultural expression, opening up new possibilities for our state, local, and federal arts and culture programs. This session will explore why and how All needs to be more integrated with the humanities and arts in order to contribute to human flourishing, especially when it comes to social justice.

#### Speakers:



Michele Elam, William Robertson Coe Professor of Humanities, Stanford University; Faculty Associate Director, Stanford HAI

Michele Elam is also a race & technology affiliate at the Center for Comparative Studies in Race and Ethnicity.

Elam's research in interdisciplinary humanities connects literature and the social sciences in order to examine changing cultural interpretations of gender and race. Her work is informed by the understanding that racial perception in particular impacts outcomes for health, wealth, and social justice. More recently, her scholarship examines intersections of race, technology, and the arts. Making Race in the Age of AI, her most recent book project, considers how the humanities and arts function as key crucibles through which to frame and address urgent social questions about equity in emergent technologies.



Kamal Sinclair, Senior Director of Digital Innovation, The Music Center in Los Angeles

Kamal Sinclair also serves as an advisor or board member to Peabody

Awards interactive Board, For Freedoms, NEW INC.'s ONX Studio, Civic Signals, For Freedoms, MIT's Center for Advanced Virtuality, and Eyebeam. Previously, she was the Director of Sundance Institute's New Frontier Labs Program, External Advisor to Ford Foundation's JustFilms and MacArthur Foundation's Journalism & Media Program, Executive Director of the Guild of Future Architects, and artist/producer on Question Bridge: Black Males. She is the co-author of Making a New Reality.

11:00am - 11:15am



#### 11:15am - 12:15pm

#### Session 3: Transforming Healthcare Through Innovation

Some of the most exciting advances of this technological wave are focused on healthcare: faster and better diagnoses, enhanced therapies, increased hospital standards which reduce patient harms, and protein folding which has the potential to cure debilitating diseases. Healthcare is on the cusp of a revolution that will advance human well-being. At the same time, the United States faces an incredible shortage of qualified healthcare workers, lacks proper evaluation of medical devices, and struggles with unclear liability risk/clinician responsibility. These mounting challenges raise the question, can Al help "save" the U.S. healthcare system? This session will highlight the coming changes in healthcare, the opportunities and risks Al presents, and how policies can ensure safe and robust health systems.

#### Speaker:



#### Alyce Adams,

Medicine Innovation Professor, Professor of Epidemiology and Population Health, of Health Policy, and, by courtesy, of Pediatrics, Stanford University; Associate Director for health Equity and Community Engagement, Stanford Cancer Institute

Focusing on racial and socioeconomic disparities in chronic disease treatment outcomes, Alyce Adams' interdisciplinary research seeks to evaluate the impact of changes in drug coverage policy on access to essential medications, understand the drivers of disparities

in treatment adherence among insured populations, and test strategies for maximizing the benefits of treatment outcomes while minimizing harms through informed decision-making. Prior to joining Stanford School of Medicine, Adams was associate director for health care delivery and policy and a research scientist at the Kaiser Permanente Division of Research, as well as a professor at the Bernard J. Tyson Kaiser Permanente School of Medicine.



#### 11:15am - 12:15pm Session 3, continued

#### Speakers:



Matthew Lungren,
Chief Medical Information
Officer, Nuance
Communications, a
Microsoft Company;
Associate Clinical Professor,
University of California San
Francisco; Associate Fellow,

Stanford Center for Artificial Intelligence in Medicine & Imaging

Matthew Lungren is Chief Medical Information
Officer at Nuance Communications, a Microsoft
Company. As a physician and clinical machine
learning researcher, he maintains an interventional
radiology practice at UCSF while also serving as
adjunct faculty for other leading academic medical
centers including Stanford and Duke.

Prior to joining Microsoft, Lungren was an interventional radiologist and research faculty at Stanford University Medical School where he led the Stanford Center for Artificial Intelligence in Medicine and Imaging (AIMI). More recently he served as Principal for Clinical AI/ML at Amazon Web Services in World Wide Public Sector Healthcare, focusing on business development for clinical machine learning technologies in the public cloud.

His scientific work has led to more than 100 publications, including work on multi-modal data fusion models for healthcare applications, new computer vision and natural language processing approaches for healthcare specific domains, opportunistic screening with machine learning for public health applications, open medical data as public good, and prospective clinical trials for clinical Al translation.



Sherri Rose (moderator), Associate Professor of Health Policy, Stanford University; Co-Director, Stanford Health Policy Data Science Lab; Faculty Affiliate, Stanford HAI

Sherri Rose's research is centered on developing and integrating innovative statistical machine learning approaches to improve human health and health equity. Within health policy, Rose works on risk adjustment, ethical algorithms in healthcare, comparative effectiveness research, and health program evaluation. She has published interdisciplinary projects across varied outlets, including Biometrics, Journal of the American Statistical Association, Journal of Health Economics, Health Affairs, and New England Journal of Medicine. In 2011, Rose co-authored the first book on machine learning for causal inference, with a sequel text released in 2018. She has been co-editor-in-chief of the journal Biostatistics since 2019.



#### 12:15pm - 1:30pm

#### Session 4 (Lunch): Modernizing a Mammoth: Use-Cases of Public Sector Al

The U.S. government is in great need of a technological upgrade. From streamlining administrative processes to providing personalized services to constituents, there is ample opportunity for AI to help government agencies achieve their missions. However, integrating AI into the government is not as easy as obtaining and deploying the technology. Talent, infrastructure, public trust, and morale play equally important roles in ensuring the successful modernization of government. This session will dive into current use-cases of AI in government, the challenges and successes of these cases, and how to improve the integration of new technologies that will help the government serve its citizens.

#### Speaker:



<u>Daniel Ho</u>, William Benjamin Scott and Luna M. Scott Professor of Law, Stanford Law School; Director, Stanford Regulation, Evaluation, and Governance Lab; Faculty Associate Director, Stanford HAI; Member, National Artificial Intelligence Advisory Committee See biography on page 12.

1:30pm - 1:45pm

**Break** 



#### 1:45pm - 2:45pm

## Closing Keynote Session 5: Resisting Digital Temptations: How Al Fuels Addiction

From substance abuse to gluttonous diets, addiction has long devastated humanity. But how has AI fueled and even introduced new addictions for humans? In recent years, gaming platforms have deployed algorithms that lead players to believe they are going to win, and in turn, enticing them to play again and again. And tailored advertisements on e-commerce platforms provide the dopamine hit at the optimal moment to compel consumers into purchasing goods they may not need. This session will unpack how AI has introduced new gateway opportunities for human addiction and how to resist these digital temptations.

#### Speakers:



Jennifer King,
Privacy and Data Policy
Fellow, Stanford HAI
See biography on page 22.



Anna Lembke, Professor of Psychiatry and Behavioral Science, Stanford University See biography on page 13.

#### 2:45pm - 4:15pm

## Session 6: Trip to the Stanford Virtual Human Interaction Lab



Staffers will take a trip to Stanford's Virtual Human Interaction Lab (VHIL) to get hands-on experience in virtual and augmented reality technology (VR/AR). This session will dive into how VR/AR will transform society, how to create VR/AR that will enhance and not detract from reality, and the psychological processes that people undergo while using VR/AR.

#### Speaker:



<u>Jeremy Bailenson</u>, Founding Director, Stanford Virtual Human Interaction Lab; Thomas More Storke Professor of Communication, Stanford University; Senior Fellow, Stanford Woods Institute for the Environment; Faculty Leader, Stanford Center for Longevity

Jeremy Bailenson earned a B.A. from the University of Michigan in 1994 and a Ph.D. in cognitive psychology from Northwestern University in 1999. He spent four years at the University of California, Santa Barbara, as a postdoctoral fellow and then an assistant research professor.



4:15pm - 4:30pm

Walk to Gates

4:30pm - 6:30pm

Dinner

The final dinner will recap the entire boot camp, solicit feedback on what staffers enjoyed, and invite suggestions for areas of improvement. HAI staff and directors will lead this conversation.

### Speaker:



Tina Huang, Policy Program Manager, Stanford HAI

Tina Huang is the Policy Program Manager at the Stanford Institute for Human-Centered Artificial Intelligence (HAI). In this role, she oversees numerous programs designed to equip policymakers in the United States and abroad with the knowledge and skills necessary to make informed decisions on various emerging technologies.

Prior to joining HAI, Tina served as the AI policy fellow for Rep. Jerry McNerney (CA-09), co-chair of the Congressional AI Caucus, where she provided research support for

the congressman's Al legislative agenda. Tina was also a research analyst at Georgetown's Center for Security and Emerging Technology, where she focused on Al talent, specifically analyzing the competitiveness of U.S. immigration policies for attracting and retaining international talent compared to those in U.S. economic competitor nations. She also conducted research on U.S. military investments in Al and the calibration of trust in human-machine teams engaged in warfare environments. Tina is an adviser to Girl Security, a nonprofit preparing girls, women, and gender minorities for national security careers. She previously served as curriculum program director for Girl Security, where she created modules on various national security topics for middle- to high-school-aged girls. Tina earned her B.A. in international studies from Emory University and M.A. in security studies from the Georgetown Walsh School of Foreign Service.



### DAY 1: MONDAY, AUGUST 8, 2022

9:31am

Flight Arrives at SFO airport

9:31am — 11:15am

Travel to hotel and campus

11:15am - 11:30am

### WELCOME SESSION AND LUNCH

Speakers:

John Robichaux, Director of Education, Stanford HAI

Russell Wald, Director of Policy, Stanford HAI

Stanford HAI staff will welcome congressional staffers to campus and provide an overview of why the boot camp was created and what Stanford HAI hopes for participants to gain.

11:30am — 12:30pm

### **SESSION 1: MAPPING THE AI LANDSCAPE**

### Speaker:

Peter Norvig, Distinguished Education Fellow, Stanford HAI; Director of Research, Google

### **Session Description:**

This session will cover the basic concepts of AI, including compute power, neural networks, narrow vs. general AI, gradient descent, and more. It will also provide a bird's-eye view of the AI landscape, covering different AI techniques such as deep learning, computer vision, natural language processing, and supervised and unsupervised learning. Participants will walk away with a greater understanding of the primary aspects of AI and be better prepared for the boot camp.

### **Learning Objectives:**

Build a foundational understanding of AI and its stages of development; recognize that AI is not simply coding and computer science but requires interdisciplinary analysis.

12:30pm — 1:30pm

### SESSION 2: MITIGATING RISK: IMPLEMENTING SAFE AND ROBUST AI

### Speakers:

<u>Anthony Corso</u>, Executive Director, Stanford Center for Al Safety; Aeronautics and Astronautics Postdoctoral Researcher, Stanford University

Mykel Kochenderfer, Associate Professor of Aeronautics and Astronautics and, by courtesy, of Computer Science, Stanford University; Faculty Affiliate, Stanford HAI

### **Session Description:**

The consequences of deploying robust AI and decision-making technologies in safety-critical systems such as driverless vehicles and autonomous aircraft are enormous. Challenges for AI developers range from biased inputs, constantly evolving conditions, and explainability issues, among others. This session will discuss the obstacles developers face as well as the difficult—and often politically fraught—decisions they make around operational efficiency and how they define acceptable risk parameters.

### **Learning Objectives:**

What makes an AI system robust, and in turn, what makes an AI system brittle; why it is challenging for developers to mitigate or eliminate all safety risks in an AI system; best approaches to deploying AI and ensuring safe outcomes.



1:30pm - 1:45pm

Break

1:45pm - 2:45pm

### SESSION 3: THE FUEL OF AI: DATA (AND ITS PERILS)

#### Speakers:

<u>Jennifer King</u>, Privacy and Data Policy Fellow, Stanford HAI

<u>Terah Lyons</u>, (moderator), Executive In Residence, Zetta Venture Partners;

Member of the HAI Index Steering Committee and Affiliated Fellow, Stanford HAI

<u>James Zou</u>, Assistant Professor of Biomedical Data Science, Stanford University; Faculty

Affiliate, Stanford HAI

### **Session Description:**

Contemporary AI technologies run on data, but AI developers face significant obstacles in acquiring and cleaning data. In addition, developers must do their best to ensure data's inherent biases (and their non-obvious proxies) are accounted for in their AI systems. Moreover, different social values around privacy, data ownership, and data creation impact what AI technologies are possible. This session will dive into how the data policies developed today will shape the technologies of tomorrow.

### **Learning Objectives:**

Understand the recent data boom and how it has contributed to Al advancements; obstacles of collecting and cleaning data; different ways in which data can be biased; how policies around data and privacy can have ripple effects in the data economy.

2:45pm - 3:30pm

### SESSION 4: AI, AUTOMATION, AND THE FUTURE OF WORK

### Speaker:

<u>Erik Brynjolfsson</u>, Director, Stanford Digital Economy Lab; Jerry Yang and Akiko Yamazaki Professor and Senior Fellow, Stanford HAI; Ralph Landau Senior Fellow, Stanford Institute for Economic Policy Research

### **Session Description:**

Al and automation will have a rippling effect on today's workforce and the future of work. Mainstream narratives forecast Al will displace workers and funnel profits up to a select few. Alternatively, Al has the potential to augment and supercharge labor, ensuring the benefits of Al are spread and enjoyed widely. This session dives into deeper detail regarding what exactly we should expect as Al and automation integrate into the economy and the subsequent consequences for the workforce. The panelists will also discuss how policies can reshape and guide what the future holds.

### **Learning Objectives:**

How Al and automation are expected to shift the current state of the workforce; ways to ensure the benefits and wealth of Al in the economy are enjoyed by most and not merely a few.



3:45pm - 4:45pm

### SESSION 5: UNDERSTANDING THE BASICS OF FOUNDATION MODELS

### Speakers:

Rishi Bommasani, Computer Science Ph.D. Candidate, Stanford University

Percy Liang, Associate Professor of Computer Science, Stanford University; Director,
Stanford Center for Research on Foundation Models; Faculty Affiliate, Stanford HAI

### **Session Description:**

Recently, a new successful paradigm for building AI systems has emerged: train one model on a significant amount of data and adapt it to numerous applications. We have deemed such a model a foundation model. This session unpacks how foundation models were created and deployed, the requirements to build one, expected and unexpected consequences of these models, and other hot topics surrounding the use of large AI models.

### **Learning Objectives:**

What differentiates foundation models from regular Al models; the exciting potential and concerning societal consequences of foundation models; speculating the future of foundation model research.

4:45pm - 5:30pm

# KEYNOTE FIRESIDE CHAT CUTTING EDGE: AI DEVELOPMENTS THAT ARE STEERING THE FUTURE

### Speakers:

<u>Fei-Fei Li</u>, Sequoia Professor of Computer Science, Stanford University; Denning Co-Director, Stanford HAI

<u>James Manyika</u>, Vice Chair, National Artificial Intelligence Advisory Committee; Advisory Council Member and Distinguished Fellow, Stanford HAI; Senior Vice President of Technology and Society, Google

The rapid advancements in Al in recent years haves shocked the world. From models generating realistic images from scratch to ambient technologies that enhance the human condition, the possibilities of what Al can do for humanity are endless. Understanding today's cutting-edge Al will help steer tomorrow's innovation. This session will dive into what is on the horizon of Al advancements and how these technologies can be leveraged to benefit society.

### **Learning Objectives:**

Delve into recent significant AI advancements; explore different ways AI can be leveraged to benefit society; speculate on new AI technologies on the horizon.

5:30pm - 7:00pm

Dinner



### DAY 2: TUESDAY, AUGUST 9, 2022

8:30am - 9:00am

**Breakfast/Debrief** 

Speakers:

John Robichaux, Director of Education, Stanford HAI

Russell Wald, Director of Policy, Stanford HAI

Stanford HAI staff will lead a discussion debriefing the key concepts that staffers learned in earlier sessions. They will also offer a preview of Day 2 and leave ample time for questions.

9:00am - 10:00am

# SESSION 1: HOW AI WILL SHAPE THE FUTURE OF INTERNATIONAL SECURITY AND U.S. INTELLIGENCE

#### Speakers:

Brad Boyd (moderator), Visiting Fellow, Hoover Institution

<u>Harold Trinkunas</u>, Deputy Director and Senior Research Scholar, Stanford Center for International Security and Cooperation

<u>Amy Zegart</u>, Senior Fellow, Stanford Freeman Spogli Institute for International Studies; Morris Arnold and Nona Jean Cox Senior Fellow, Hoover Institution; Chair, Steering Committee on International Security, Stanford HAI

### **Session Description:**

Spying has never been more ubiquitous—or less understood. This crisis in intelligence education is fueling conspiracy theories and hurting intelligence policy. At the same time, Al is introducing new opportunities to strengthen U.S. intelligence capabilities, but only if decision makers understand how the U.S. intelligence community and Al technologies actually work. This session will separate fact from fiction as panelists discuss the past, present, and future of American espionage and how Al is creating an adapt-or-fail moment for U.S. intelligence agencies.

### **Learning Objectives:**

History and present of U.S. intelligence; implications of AI on intelligence and international security

10:00am - 10:15am

**Break** 



10:15am - 11:15am

# SESSION 2: DIGITAL DUPES: HOW AI IS DISTORTING TRUTH THROUGH DISINFORMATION AND DEEPFAKES

### Speakers:

Andrew Grotto, Director, Program on Geopolitics, Technology, and Governance, Stanford Cyber Policy Center; William J. Perry International Security Fellow, Stanford Center for International Security and Cooperation; Visiting Fellow, Hoover Institution

Riana Pfefferkorn, Research Scholar, Stanford Internet Observatory, Stanford Cyber Policy Center

### **Session Description:**

The rapid spread of disinformation has challenged societies and deepened mistrust, threatening to erode democratic values. Furthermore, synthetic media from the advent of generative adversarial networks (GANS) has created deceptively realistic images and videos—known as deepfakes—that are indistinguishable from reality. These developments are leading to an information crisis where consumers are becoming less certain of the veracity of the content they encounter. This session will dive into how Al has changed the information ecosystem and how policy can help protect people from fake content.

### **Learning Objectives:**

How AI can be used to deceive people; impact of deception or the spread of disinformation; policy opportunities and challenges to address fake content.

11:15am - 12:15pm

# SESSION 3: THE CHINA CHALLENGE: DEVELOPING HUMAN-CENTERED AI WITH AN AUTHORITARIAN COMPETITOR

### Speakers:

<u>Oriana Mastro</u>, Center Fellow, Stanford Freeman Spogli Institute for International Studies <u>Graham Webster</u>, Research Scholar and Editor-in-Chief, DigiChina, Stanford Cyber Policy Center <u>Daniel Zhang</u> (moderator), Policy Research Manager, Stanford HAI

### **Session Description:**

China remains one of the most complex geopolitical challenges for the United States. The Chinese government has made clear its intention to be the leader in Al and other key dual-use technologies to secure an economic, political, and military advantage. Furthermore, the Chinese Communist Party uses Al technology to commit human rights abuses at home and abroad in a fundamentally anti-democratic manner. How can the U.S. maintain human-centered values in its technology and remain a global leader that advances an international order using technology for society's benefit? This session will dive deeply into the nuances of Sino-American relations and how the U.S. can maintain its technological superiority.

### **Learning Objectives:**

Brief history of U.S.-China relations; differing innovation ecosystems in each country; China's intention and strategy for becoming a global leader in Al and how the U.S. compares.





12:15pm - 1:00pm

Lunch

1:00pm - 2:00pm

## SESSION 4: THE POSSIBILITIES AND PITFALLS OF AI AND CLIMATE SUSTAINABILITY

#### Speakers:

Rayne Sullivan, Graduate Fellow, Stanford HAI

<u>Marshall Burke</u>, Associate Professor of Earth System Science, Stanford University; Deputy Director, Stanford Center on Food Security and the Environment; Senior Fellow, Stanford Freeman Spogli Institute for International Studies

### **Session Description:**

The risks and threats stemming from global climate change are becoming a paramount issue for policymakers. At the same time, the rapid advancements of Al have presented possible opportunities to use this technology to help tackle our greatest climate challenges, from achieving net-zero emissions to preparing for extreme weather events. Conversely, Al continues to increasingly rely on compute power, which is an energy-intensive resource and contributes to the emission of CO2. As a result, there is mounting concern around Al's environmental impact, drawing attention to the cost-benefit analysis of Al advancements. This session will unpack how Al can be used to help confront climate change while also better understanding Al's own ripple effects in the environment.

### **Learning Objectives:**

How Al can help address climate challenges; the carbon footprint of large-scale models.

2:00pm - 4:00pm

**Hotel Break** 

4:00pm - 5:00pm

## SESSION 5: FROM STARTUPS TO GIANTS: INDUSTRY PERSPECTIVES ON INNOVATION

### Speakers

<u>Jack Clark</u>, Co-Founder, Anthropic; Co-Chair of the Al Index Steering Committee, Stanford HAI <u>Vilas Dhar</u> (moderator), President and Trustee, Patrick J. McGovern Foundation; Advisory Council Member, Stanford HAI

Rachel Gillum, Vice President, Ethical and Humane Use of Technology, Salesforce; Affiliate, Stanford Immigration Policy Lab

<u>John Hennessy</u>, President Emeritus, Stanford University; Chairman of the Board, Alphabet Inc.; Advisory Council Member, Stanford HAI

<u>Susan Liautaud</u>, Founding and Managing Director, Susan Liautaud & Associates Limited; Advisory Council Member, Stanford HAI



### **Session Description:**

Silicon Valley, which is home to venture capital, startups, and leading tech firms, is a global center of tech innovation. From the startup lab to the boardrooms of major companies, this session will bring together startup founders and tech executives to map out Silicon Valley's innovation ecosystem, discuss its vibrancy, and critically think about the consequences of Al developments on society. Panelists will offer their perspectives on starting, funding, and running successful companies as well as providing counsel to companies on ensuring ethical business practices.

### **Learning Objectives:**

Understand the Silicon Valley innovation ecosystem; unique challenges and opportunities startups and large firms face; industry perspective of how policy impacts their ability to grow their firms.

5:00pm - 6:00pm

Reception

6:00pm - 7:30pm

# KEYNOTE DINNER: DEMOCRACY IN A WORLD OF AI-FUELED DISINFORMATION AND DIGITAL AUTHORITARIANISM

### Speakers:

<u>Daniel Ho</u> (moderator), William Benjamin Scott and Luna M. Scott Professor of Law, Stanford Law School; Director, Stanford Regulation, Evaluation, and Governance Lab; Faculty Associate Director, Stanford HAI; Member, National Artificial Intelligence Advisory Committee <u>Francis Fukuyama</u>, Olivier Nomellini Senior Fellow, Stanford Freeman Spogli Institute for International Studies; Director, Susan Ford Dorsey Master's in International Policy, Stanford University; Faculty Affiliate, Stanford HAI

<u>Condoleezza Rice</u>, Tad and Dianne Taube Director, Hoover Institution; Denning Professor in Global Business and the Economy, Stanford Graduate School of Business; Advisory Council Member, Stanford HAI

### Session Description:

The introduction of AI into society has had ripple effects on governments worldwide. Disinformation spreading on digital platforms—further amplified by AI—has had real-world consequences on democracy. Additionally, authoritarian countries are leveraging AI to further surveil and control their populations. The future of democracy hangs in the balance of making sure AI is used to affirm democratic systems and reinforce norms and values for the betterment of humanity. This dinner discussion will unpack the complexities of AI as it intertwines with different governments and considers how to ensure democracy prevails in a digital world.

### **Learning Objectives:**

How Al can strengthen or undermine democracy; varying consequences of Al as it integrates into different government systems.



## DAY 3: WEDNESDAY, AUGUST 10, 2022

8:30am - 9:00am

**Breakfast** 

Speakers:

John Robichaux, Director of Education, Stanford HAI

Russell Wald, Director of Policy, Stanford HAI

Stanford HAI staff will lead a discussion reviewing key concepts from the first two days of the boot camp. They will also offer a preview of Day 3 and leave ample time for questions.

9:00am - 10:00am

## SESSION 1: REVOLUTIONIZING THE CLASSROOM: HOW AI IS ADVANCING EDUCATION

### Speakers:

<u>Emma Brunskill</u>, Associate Professor of Computer Science, Stanford University; Faculty Affiliate, Stanford HAI

John Robichaux (moderator), Director of Education, Stanford HAI

<u>Daniel Schwartz</u>, James Quillen Dean and Nomellini & Olivier Professor of Educational Technology, Stanford University; Faculty Affiliate, Stanford HAI

### **Session Description:**

Al has the potential to dramatically improve education. From teacher support to personalized student engagement, Al could democratize extraordinary teaching and learning. But dangers and concerns loom. Collecting data from children raises privacy concerns, and current inequities in the education system might be exacerbated by the introduction of Al. This session will look into how Al can be leveraged to improve the education system without causing harm to students and teachers.

### **Learning Objectives:**

Al's potential to improve education; possible risks of introducing Al in education, especially with regard to children.



10:00am - 11:00am

# SESSION 2: THE NEW CREATIVE INDUSTRY: HOW AI IS RESHAPING ARTS AND CULTURE

### Speakers:

Michele Elam, William Robertson Coe Professor of Humanities, Stanford University; Faculty Associate Director, Stanford HAI

Kamal Sinclair, Senior Director of Digital Innovation, The Music Center

### **Session Description:**

Artististic and cultural expression is one of the hallmarks of advanced societies. Today we understand the intersection of arts and culture with wellness, innovation, creativity, diversity, and health. All is expanding artistic and cultural expression, opening up new possibilities for our state, local, and federal arts and culture programs. This session will explore why and how All needs to be more integrated with the humanities and arts in order to contribute to human flourishing, especially when it comes to social justice.

### Learning Objectives:

How is Al reshaping arts and culture; new opportunities for federal arts and culture programs

11:00am - 11:15am

**Break** 

11:15am - 12:15pm

### SESSION 3: TRANSFORMING HEALTHCARE THROUGH INNOVATION

### Speakers:

Alyce Adams, Medicine Innovation Professor, Professor of Epidemiology and Population Health, of Health Policy, and, by courtesy, of Pediatrics, Stanford University

Matthew Lungren, Chief Medical Information Officer, Nuance Communications, a Microsoft Company; Associate Clinical Professor, University of California San Francisco; Associate Fellow, Stanford Center for Artificial Intelligence in Medicine & Imaging

Sherri Rose (moderator), Associate Professor of Health Policy, Stanford University;

Co-Director, Stanford Health Policy Data Science Lab; Faculty Affiliate, Stanford HAI

### **Session Description:**

Some of the most exciting advances of this technological wave are focused on healthcare: faster and better diagnoses, enhanced therapies, increased hospital standards which reduce patient harms, and protein folding which has the potential to cure debilitating diseases. Healthcare is on the cusp of a revolution that will advance human well-being. At the same time, the United States faces an incredible shortage of qualified healthcare workers, lacks proper evaluation of medical devices, and struggles with unclear liability risk/clinician responsibility. These mounting challenges raise the question, can Al help "save" the U.S. healthcare system? This session will highlight the coming changes in healthcare, the opportunities and risks Al presents, and how policies can ensure safe and robust health systems.

### **Learning Objectives:**

Recent medical Al advancements; future opportunities for Al in healthcare; risks and consequences of using Al in healthcare.



12:15pm - 1:30pm

# SESSION 4 (LUNCH): MODERNIZING A MAMMOTH: USE-CASES OF PUBLIC SECTOR AI

### Speaker:

<u>Daniel Ho</u>, William Benjamin Scott and Luna M. Scott Professor of Law, Stanford Law School; Director, Stanford Regulation, Evaluation, and Governance Lab; Faculty Associate Director, Stanford HAI

### **Session Description:**

The U.S. government is in great need of a technological upgrade. From streamlining administrative processes to providing personalized services to constituents, there is ample opportunity for AI to help government agencies achieve their missions. However, integrating AI into the government is not as easy as obtaining and deploying the technology. Talent, infrastructure, public trust, and morale play equally important roles in ensuring the successful modernization of government. This session will dive into current use-cases of AI in government, the challenges and successes of these cases, and how to improve the integration of new technologies that will help the government serve its citizens.

### **Learning Objectives:**

Challenges of AI integration in government; different types of AI use-cases for government; various factors needed to ensure AI integration is successful.

1:30pm - 1:45pm

**Break** 

1:45pm - 2:45pm

# CLOSING KEYNOTE SESSION 5: THE NEUROSCIENCE OF ADDICTION AND IMPLICATIONS FOR A DIGITAL WORLD

### Speakers:

<u>Jennifer King</u>, Privacy and Data Policy Fellow, Stanford HAI

<u>Anna Lembke</u>, Professor of Psychiatry and Behavioral Science, Stanford School of Medicine;
Chief of the Stanford Addiction Medicine Dual Diagnosis Clinic

### **Session Description:**

This is a time of unprecedented access to high-reward, high-dopamine stimuli: drugs, food, news, gambling, shopping, gaming, texting, Facebooking, Instagramming, YouTubing, tweeting... The increased numbers, variety, and potency are staggering. As such, we've all become vulnerable to compulsive overconsumption. Yet, it is possible to find contentment and connectedness by keeping dopamine in check. This session will provide a practical, science-informed approach to addressing compulsive overconsumption of everything from food, to sex, to video games.

### **Learning Objectives:**

Describe the neuroscience of pleasure and pain and what happens in the brain as we become addicted; explain homeostasis and how repeated exposure to drugs of all kinds tilts the hedonic set-point to the side of pain; identify dopamine fasting as a practical, feasible, and effective way to reset reward pathways; review the science of hormesis: How intentionally engaging in pain/discomfort can improve mood and well-being



2:45pm - 4:15pm

# SESSION 6: TRIP TO THE STANFORD VIRTUAL HUMAN INTERACTION LAB

### Speaker:

<u>Jeremy Bailenson</u>, Founding Director, Stanford Virtual Human Interaction Lab; Thomas More Storke Professor of Communication, Stanford University

### **Session Description:**

Staffers will take a trip to Stanford's Virtual Human Interaction Lab (VHIL) to get hands-on experience in virtual and augmented reality technology (VR/AR). This session will dive into how VR/AR will transform society, how to create VR/AR that will enhance and not detract from reality, and the psychological processes that people undergo while using VR/AR.

### **Learning Objectives:**

The difference between AR and VR; various applications of AR/VR; how VR/AR impacts human reality and experiences.

4:15pm - 4:30pm

**Walk to Gates** 

4:30pm - 6:30pm

### **CLOSING DINNER**

### Speaker:

Tina Huang, Policy Program Manager, Stanford HAI

The final dinner will recap the entire boot camp, solicit feedback on what staffers enjoyed, and invite suggestions for areas of improvement. Senior HAI staff and directors will lead this conversation.

## **DAY 4: AUGUST 11, 2022**

6:00am

Shuttle leaves hotel to SFO airport

### List of Attendees:

- 1. Hannah Anderson
- 2. Jennifer Epperson
- 3. Nawaid Ladak
- 4. Roger Blevins, Jr.
- 5. Kyle Klein
- 6. Patricia Clarke
- 7. Ubong Akpaninyie
- 8. Sean Misko

Note: Stanford HAI originally purchased a group flight early on at \$1,157.95 per economy class round trip. However, HAI had to purchase additional flights as the final cohort exceeded our previous group flight purchase. At the time of the second group flight purchase, flights increased to \$1,291.25.